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# 305

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CIA-RDP86-00513R000928910001-1"

LAYKHTMAN, I.B.

Performance of phase discriminators in the superhigh-frequency band. Nauch.dokl.vys.shkoly; radiotekhnika elektron. no.4:146-152 '58. (MIRA 12:6)

1. Kafedra teoreticheskikh osnov radiotekhniki Kiyevskogo politekhnicheskogo instituta.

(Microwaves)

9 (2)

06352  
SOV/142-2-4-5/26

AUTHOR: Kaplan, E.N., Laykhtman, I.B.

TITLE: An Analysis of the Work of an Impedance Measuring Instrument in the Range of Super-High Frequencies

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1959, Vol 2, Nr 4, pp 419-423 (USSR)

ABSTRACT: The work of an impedance measuring instrument for the shf range is analyzed. For this purpose, a method is used which is based on separating the incident and the reflected wave by a special directional coupler - the reflectometer suggested by A.A. Pistol'kors and M.S. Neyman. The authors discuss the principal error sources common to an impedance measuring instrument based on the methods of comparison and synchronous detection. Some recommendations are given for increasing the accuracy by selecting the proper circuits and operating conditions of the measuring instrument. The method provides lower requirements for the detector characteristics and has an increased sensitivity. The appli-

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SOV/142-2-4-5/26

An Analysis of the Work of an Impedance Measuring Instrument in  
the Range of Super-High Frequencies

cation of periodic modulation of the phase of the reflected signal will increase the accuracy essentially. Using any type of amplitude modulation will increase the error rating. The publication of this article was recommended by the Department of Theoretical Principles of Radio Engineering of the Kiyevskiy ordena Lenina politekhnicheskii institut (Kiyev - Order of Lenin - Polytechnic Institute). There are 1 circuit diagram and 1 American reference.

SUBMITTED: December 16, 1958 (June 27, 1958)

Card 2/2

BOVA, N.T.; KAPLAN, E.N.; LAYKHTMAN, I.B.

Calculation of a homogeneous line with an arbitrary number of concentrated heterogeneities. Izv. vys. ucheb. zav.; radiotekh. 5 no.3:376-380 My-Je '62. (MIRA 15:9)

1. Rekomendovana kafedroy teoreticheskikh osnov radiotekhniki  
Kiyevskogo ordena Lenina politekhnicheskogo instituta.  
(Wave guides) (Radio lines) (Microwaves)

L 6436-66 EWT(d)/EEC(k)-2

ACC NR: AP5026192

SOURCE CODE: UR/0142/65/008/004/0391/0403

AUTHOR: Bova, N. T.; Laykhtman, I. B.; Molebnyy, V. V.

ORG: none

20  
B

TITLE: Methods of measuring group velocity and group delay

SOURCE: IVUZ. Radiotekhnika, v. 8, no. 4, 1965, 391-403

TOPIC TAGS: electric measurement, radio measurement NM

ABSTRACT: Based on 1952-65 Soviet and 1927-62 Western sources, a review of the methods of measuring group velocity and group delay used in the communication engineering is presented. Definitions of "phase delay", "group delay", and "group velocity" are given, and dispersing and nondispersing quadripoles are characterized. The measurement methods are subdivided into these two groups: (1) Those based on the determination of phase characteristic slope and (2) Those based on the determination of modulating-signal delay. The method of  $\pi$  points and its modifications including pulsed measurements, which belongs with the first group, is briefly described. These methods belonging with the second group are described: a method of sinusoidal modulation, methods of pulse modulation (delay measurement by

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UDC: 621.317.023

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L 6436-66

ACC NR: AP5026192

oscilloscopes, counters, or delay-frequency conversion; by measuring the pulse repetition rate in a pulse generator with a delayed feedback; by compensation techniques). Orig. art. has: 10 figures and 20 formulas.

SUB CODE: EC/ SUBM DATE: 02Jun64/ ORIG REF: 017/ OTH REF: 038

DW  
Card 2/2

BOVA, Nikolay Timofeyevich, kand. tekhn. nauk; LAVKHTMAN, Iva...  
Borisovna, kand. tekhn. nauk; REZNIKOV, G.B., kand. tekhn.  
nauk, retsenzent; KOVAL'CHUK, A.V., inzh., red.izd-va;  
MATUSEVICH, S.M., tekhn. red.

[Measurement of the parameters of wave guide elements]  
Izmerenie parametrov volnovodnykh elementov. Kiev, Gos-  
tekhizdat USSR, 1964. 121 p. (MIRA 17:4)

BELKIN, M.K., kand.tekhn.nauk; LAYKHTMAN, I.B., kand.tekhn.nauk

Review of G.IA.Mirskii's book "Radioelectronic measurements.  
Izv.vys.ucheb.zav.; radiotekh. 7 no.6:770 N-D '64.

(MIRA 18:4)

BIRMAN, A.M., doktor ekonom.nauk; BRAZOVSKAYA, T.I.; BELOUSOVICH, S.N.;  
VESELKOV, F.S.; KATSENELBENBAUM, Z.S.; IVLIYEV, I.V.; SEMENOV, I.Ya.;  
YAKOVLEV, M.S.; LAYKHTMAN, R.I.; GOFMAN, G.A.; SHUMOV, N.S.;  
VINOKUR, R.D., dotsent; TATSIY, G.M., red.; KONDRAT'YEVA, A., red.;  
TELEGINA, T., tekhn.red.

[Finances of enterprises and branches of the national economy]  
Finansy predpriatii i otriaslei narodnogo khoziaistva. Avtorskii  
kollektiv pod rukovodstvom A.M.Birmana. Moskva, Gosfinizdat, 1960.  
576 p.  
(MIRA 14:3)

1. Moskovskiy finansovyy institut (for Vinokur).  
(Finance)

VARTANYAN, A.M.; PONOMAREV, V.D.; TSEREKOV, T.Kh.; LAYKIN, A.Ya.

Roasting of zinc sulfide concentrates using an air-oxygen blow  
in a fluidized bed furnace at the V.I.Lenin Lead and Zinc Combine  
in Ust'-Kamenogorsk. TSvet. met. 35 no.11:43-48 N '62.

(MIRA 15:11)

(Ust'-Kamenogorsk--Zinc--Metallurgy)  
(Oxygen--Industrial applications)

TSEREKOV, T.Kh.; LAYKIN, A.Ya.; BATYUKOV, M.I.; ZAROVNYY, M.I.;  
CHUPRIKOV, V.I.

Using oxygen during the Waelz process treatment of zinc cake.  
TSvet. met. 36 no.6:34-39 Je '63. (MIRA 16:7)

(Nonferrous metals--Metallurgy)  
(Oxygen--Industrial applications)

LAYKO, A.V.

Action of some antitumor antibiotics on the synthesis of nucleic acids in the cells of staphylococci. Antibiotiki 7 no.7:601-605 Jl '62. (MIRA 16:10)

1. Laboratoriya izyskaniya i kul'tivirovaniya produtsentov (zav. - prof. G.F.Gauze) Instituta po izyskaniyu novykh antibiotikov AMN SSSR.  
(ANTIBIOTICS) (CYTOTOXIC DRUGS) (NUCLEIC ACIDS)  
(STAPHYLOCOCCUS)

DYKHNO, M. M., kand. med. nauk; LAYKO, A. V.; DRATVIN, S. A.

Use of cytochemical methods in the determination of live and dead  
mycobacteria. Probl. tub. no. 7:73-78 '61. (MIRA 14:12)

1. Iz kafedry mikrobiologii (zav. - zasluzhennyy deyatel' nauki  
prof. M. N. Lebedeva) I Moskovskogo ordena Lenina Meditsinskogo  
instituta imeni I. M. Sechenova (dir. - prof. V. V. Kovanov)

(MYCOBACTERIUM TUBERCULOSIS)

GAUZE, G.F.; LAYKO, A.V.

Autonomous protein synthesis in staphylococcal mutants with  
deficient oxidation. Dokl.AN SSSR 149 no.3:711-713 Mr '63.  
(MIRA 16:4)

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.  
Predstavleno akademikom A.A. Imshenetskim.  
(Staphylococcus) (Protein metabolism)

LAYKO, A. V.; GAUZE, G. F.;

"On the selective action of some antitumor antibiotics upon the nucleic acids of Staphylococci and of their mutants."

report submitted for 6th Intl Biochemistry Cong, New York City, 26 Jul-1 Aug 64.

GAUZE, G. F.; LAYKO, A. V.

"The selective action of some antineoplastic antibiotics on the nucleic acids  
in staphylococci and their mutants."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

Inst for Search for New Antibiotics, AMS USSR, Moscow.

LAYKO, A.V.

Selective action of some antitumor antibiotics on nucleic acids  
of staphylococci and their mutants. Antibiotiki 9 no.8:711-716  
Ag '64. (MIRA 18:3)

1. Laboratoriya izyskaniya i kul'tivirovaniya produtsentov (zav.  
- prof. G.F. Gauze) Instituta po izyskaniyu novykh antibiotikov  
AMN SSSR, Moskva.

GAUZE, G.F.; LAYKO, A.V.

Protein synthesis as a function of nucleic acid synthesis in  
staphylococci and their oxidation-deficient mutants.  
Mikrobiologija 33 no.2:193-197 Mr-Ap '64.

1. Institut po izyskaniyu novykh antibiotikov AMN SSSR.  
(MTRA 17:12)

LHYKO, O.G.  
p.2

18(5)

PHASE I BOOK EXPLOITATION

SOV/1907

Akademiya nauk Ukrainskoy SSR. Kiyev Otdeleniye tekhnicheskikh nauk

Voprosy proizvodstva stali vyp.6 (Problems of Steel Production, Nr 6)  
Kiyev, Izd-vo AN Ukrainskoy SSR, 1958. 137 p. Errata slip inserted.  
2,000 copies printed.

Resp. Ed.: N.N. Dobrokhoto, Academician, Ukr. SSR Academy of Sciences; Ed. of Publishing House: N.M. Labinova; Tech. Ed.: V.I. Yurchishin.

PURPOSE: This book is intended for engineers and scientific personnel in the field of steel production.

COVERAGE: This is a collection of articles dealing with various aspects of the production of steel, including the designing of open-

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## Problems of Steel Production, Nr 6

SOV/1907

hearth furnaces, thermal processes in the furnaces, thermodynamics of steel-making processes, technology of producing high-grade steel, and changes in the size and shape of ingots. Other topics discussed are the properties of chrome-manganese stainless steels, improvement of ball-bearing steel, ingot defects, ingot quality as determined by temperature of teeming and shape of mold, and certain aspects of steel rolling. Some of the articles are accompanied by references, both Soviet and non-Soviet.

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Problems of Steel Production, Nr 6	SOV/1907
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Card 3/4

Problems of Steel Production, Nr 6  
the Quality of Steel Ingots

SOV/1907

Yefimov, V.A., M.P. Sabiyev, and V.P. Osipov. Reduction of Head  
and Butt Crops in the Rolling of Ingots 96

Yefimov, V.A., V.P. Osipov, and A.M. Meleshko. An Investigation  
of the Conditions for Rolling Sheet Bar With Wavy Surfaces 110

Fedorovich, V.G. Experiments in the Conversion of High-phos-  
phorus Pig Iron in a Converter With Side Blast of Oxygen 123

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Card 4/4

GO/bg  
7-28-59

KOBEZA, I.I.; LAYKO, B.G.

Investigating the performance of open-hearth furnaces with various-type burners. Vop.proizv.stali no.6:27-32 '58. (MIRA 12:3)  
(Open-hearth furnaces)

LAPITSKIY, V.I.; TARAPAY, M.A.; OKHOTSKIY, V.B.; LAYKO, B.G.; FIRER, L.M.  
Prinimali uchastiye: SESYUK,G.S. [deceased]; KUSHNAREV, I.T.;  
PATLAN', Ye.F.; PITOSHNICHEKO, G.P.; SOSEDKO, P.M.

Ways of reducing wheel discards because of angular segregation.  
Izv. vys. ucheb. zav.; chern. met. 7 no.7:84-89 '64  
(MIRA 17:8)

1. Dnepropetrovskiy metallurgicheskiy institut i Zavod im.  
K. Libknekhta.

LAPITSKIY, V. I.; KONOVALOV, V. S.; KIRSANOV, V. M.; BUGRIYENKO, V. A.;  
Prinimalni uchastiye: LEGKOSTUP, O. I.; PATLAN', Ye. F.;  
LAYKO, B. G.; FRUMKIN, A. P.; GONCHAROV, G. P.

Use of graphite as packing material in the bottom pouring of  
killed steel. Izv. vys. ucheb. zav.; chern. met. 5 no.12:56-60  
'62. (MIRA 16:1)

1. Dnepropetrovskiy metallurgicheskiy institut.

(Steel ingots) (Graphite)

LAVIN, B. V. Cand Tech Sci -- (diss) "On the <sup>problem</sup> ~~question~~ of electrification of track  
work <sup>at</sup> junctions and stations" Kos, 1957. 17 cm 22 cm. (EXAMIN RAILWAYS  
USSR. All-Union Sci Research Institute of Railways Transport), 100 copies  
(SL, 20-57, ff)

32

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AUTHOR: Layko, F.M., and Zolotov, N.A., Engineers SOV/128-59-4-7/27

TITLE: Automating the Charging of Coke Into the Cupola

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 4, pp 12-14 (USSR)

ABSTRACT: In the foundry for malleable cast iron of the Likhachev Auto Plant, an installation was built which mechanizes the sieving process, and provides for the transport and automatic charging of coke into the cupola. Figures 1-3 give a detailed description of this installation. It has a special charging window which is opposite the usual charging window of the cupola. The frame of the window and the gate valve are water cooled. The mechanization of the coke and lime stone charging is saving much heavy physical labor. Wagons, cranes, and other machinery are now become superfluous. The coke consumption is kept low, and the output of the cupola is raised by 10-15%, because there are no more interruptions of its operation, which are unavoidable when charging manually. There are 2 diagrams and 1 photograph.

Card 1/1

CHERNYSHEV, V.V.; LAYKO, F.M.

Semiautomatic shakeout of molds of truck cylinder block castings.  
Lit. proizv. no. 3:16-19 Mr '62. (MIIA 15:3)  
(Foundries--Equipment and supplies)

LAYKO, M.V.; IPPOLITO, K.A.

Lumbering machine assembly on a ZIS-151 automobile chassis. Les.prom.  
14 no. 6:9-14 Je '54. (MLRA 7:6)  
(Lumbering...Machinery)

LAYKO, N.V.

Where reinforced concrete ties are laid. Put' i put.khoz.  
no.6:9-11 Je '57. (MIRA 10:7)

1. Zamestitel' nachal'nika Krinichnenskoy distantsii puti Donetskoy  
dorogi.

(Railroads--Ties, Concrete)

LAYKO, N.V., inzh. (stantsiya Molodechno)

Laying of continuous rails, Pat' i put. khaz. no.5:7-9 My '58.  
(Railroads--Track) (MIRA 10:3)

LAYKO, N.V., inzh. (stantsiya Molodechno Belorusskoy dorogi).

Maintenance of continuous track laid on reinforced concrete  
ties. Put' i put.khoz. no.1:17-18 Ja '59. (MIRA 12:2)  
(Railroads--Track) (Railroads--Ties, Concrete)

IAYKO, N.V. (g.Molodechno)

Exmerience in the maintenance of continuous rails. Zhel.  
dor.transn. 42 no.1:79-80 Ja '60. (MIRA 13:5)

1. Zamestitel' nachal'nika Molodechnenskoy distantsii nuti  
Belorusskoy dorogi.  
(Railroada--Track)

LAYKO, Nikolay Vasil'yevich; LAMIN, Fedor Grigor'yevich; OSIPOV, M.I.,  
inzh., retsenzent; PERSHIN, S.P., inzh., red.; USENKO, L.A., tekhn.  
red.

[Laying and maintenance of continuous track; experience of the  
track workers of the White Russian Railroad] Ukladka i soderzhanie  
besstykovogo puti; opyt puteitsev Belorusskoi dorogi. Moskva, Vses.  
izdatel'sko-poligraf. ob"edinenie M-va putei soobshcheniya, 1961.  
32 p. (MIRA 14:10)  
1. Zamestitel' nachal'nika 13-y distantsii puti Belorusskoy dorogi (for  
Layko). 2. Glavnnyy inzhener putevoy mashinnoy stantsii no.71 Belorus-  
skoy dorogi (for Lamin).

(Railroads--Track)

LAYKO, N.V.,

Maintenance methods should be scientifically justified. Put'  
i put.khoz. 5 no.11:27 N 'ol. (MIRA 14:12)

1. Zamestitel' nachal'nika distantsii puti, st. Molodechno,  
Fedorusskoy dorogi.  
(Railroads--Maintenance and repair)

LAYKO, N.V.; TARTAKOVSKIY, R.N., kand.tekhn.nauk (g.Gomel'); SLAVIKOVSKIY, N.A.; BARANOV, G.G.

From practices of the maintenance of a continuous track. Put' i put.khoz. 5 no.12:12-15 D '61. (MIRA 15:1)

1. Zamestitel' nachal'nika distantsii puti, st. Molodechno, Belorusskoy dorogi (for Layko). 2. Zamestitel' nachal'nika Moskovsko-Kurskoy distantsii (for Slavikovskiy). 3. Starshiy dorozhnyy master Moskovsko-Kurskoy distantsii (for Baranov).  
(Railroads--Track)

SEMELEV, M.A., inzh.; TERENT'YEV, V.G., inzh. (g.Kuybyshev); SKIBA, N.M.,  
starshiy putevoy rabochiy (Stantsiya Rubanka, Yuzhnay dorogi);  
LAYKO, N.V.

Letters to the editor. Put' i put.khoz. 5 no.12:40-41 D '61.  
(MIRA 15:1)  
1. Zamestitel' nachal'nika Molodechnenskoy distantsii Belorusskoy  
dorogi (for Layko).

(Railroads)

LAYKO, N.E.

Characteristics of the lining of continuous tracks. Put' i put.khoz.  
7 no.4:24 '63. (MIRA 16:3)

1. Zamestitel' nachal'nika Molodechnenskoy distantsii puti Belorusskoy  
dorogi.

(Railroads—Track)

LAYKO, N.V.

What kind of slabs for the paving of crossings? Put' i put. khoz.  
7 no.5:45 '63. (MIRA 16:7)

1. Zamestritel' nachal'nika Molodechnenskoy distantsii Belorusskoy  
dorogi.

(Railroads-Crossings)

LAYKO, V.F., starshiy inzhener-konstruktor

Roller current collectors on bridge cranes. Stroi. mat. 8  
no.4:40 Ap '62. (MIRA 15:8)

1. Khabarovskiy zavod zhelezobetonnykh izdeliy No.1.  
(Cranes, derricks, etc.—Equipment and supplies)

LAPITSKIY, V.I., doktor tekhn. nauk; KONOVALOV, V.S., kand. tekhn. nauk; LAYKO, V.G., inzh.; LEGKOSTUP, O.I., inzh.; PATLAN', Ye.F., inzh.

Effect of the technology of making and pouring steel on the formation of internal laps in rolled pipe. Met. i gorno-rud. prom. no.5:17-18 S-0 '63. (MIRA 16:11)

1. Dnepropetrovskiy metallurgicheskiy institut (for Lapitskiy, Konovalov). 2. Truboprovodnyy zavod im. K. Libknekhta (for Layko, Legkostup, Patlan').

LAYKOV, A., inzh.

Operation of the ZIL-130IA engines. Avt.transp. 41 no.11:17-18  
N '63. (MIRA 16:12)

LAYKOV, A., inzh.

Operating the ZIL-130 motortrucks. Avt. transp. 42 no.8;  
23-24 Ag '64.  
(MIRA 17:10)

LAYKOV, A., inzh.

Outstanding workers. Avt. transp. 42 no.10:23 6 '64.  
(MIRA V:ii)

ALEKSANDROV, A., prof.; ZHEVTYAK, P., dotsent; RABINOVICH, G., dotsent;  
YASTREBOV, N., dotsent; LAYKOV, A., prepodavatel'

Strengthen the financial service in enterprises: Efficiency is the  
important demand. Fin. SSSR 38 no.1:59-62 Ja. '64. (MIRA 17:2)

LAYKOV, A.

With public help. Fin. SSSR 31 no.9:58-60 S '60. (MIRA 13:9)

1. Kontroler-revizor Kontrol'no-revizionnogo upravleniya Ministerstva  
finansov RSFSR po Zhdanovskomu rayonu Lengrada.  
(Leningrad--Auditing)

LAIKOV, A.

Influence of the frequency of the expenditure of raw materials  
upon working capital. Fin.SSSR 37 no.3:27-33 Mr '63.

(MIRA 16:4)

(Leningrad Province—Industries)  
(Leningrad Province—Materials)

LAYKOV, A.G.

Structure of the esophageal plexus and chord in human embryogenesis.  
Vop.morf.perif.nerv.sist. no.4:103-117 '58. (MIRA 13:5)  
(VAGUS NERVE) (EMBRYOLOGY, HUMAN)

LAYKOV, A. G., CAND MED SCI, "STRUCTURE OF ESOPHAGEAL  
PLEXUSES AND CORDS (STEMS) OF VAGUS NERVES IN <sup>human</sup> EMBRYOGENESIS,"  
~~OF MED~~ RIGA, 1960. (ACAD SCI LASSR, INST OF EXPERIMENTAL  
MED). (KL, 2-61, 218).

-261-

LAYKOV, A.G.

Topography of the esophagus and stomach in human embryogenesis.  
Zdrav. Bel, 6 no.11:38-40 N '60. (MIRA 13:12)

1. Iz kafedry normal'noy anatomi cheloveka Minskogo meditsinskogo  
instituta (zaveduyushchiy kafedroy - akademik AN BSSR D.M. Golub).  
(ESOPHAGUS) (STOMACH)

LAYKOV, A.G.

Development and structure of the nerve cell elements of the vagus  
nerve in man. Vop. morf. perif. nerv. sist. no.5:148-156 '60.

(VAGUS NERVE)

(MIRA 14:3)

ZHEVTYAK, P.N., dots.; LARIONOVA, N.A., kand. ekon. nauk; LAYKOV,  
A.M., prepodavatel'; YASTREBOV, N.A., dots.; SHASHKOVSKIY,  
A.V., st. prepodavatel'; KONDRAT'Yeva, A., red.; FRANCO, E.,  
red.

[Finance of enterprises and branches of the national economy]  
Finansy predpriatii i otriaslej narodnogo khoziaistva. Mo-  
skva, Finansy, 1964. 430 p.  
(KML 17:11)

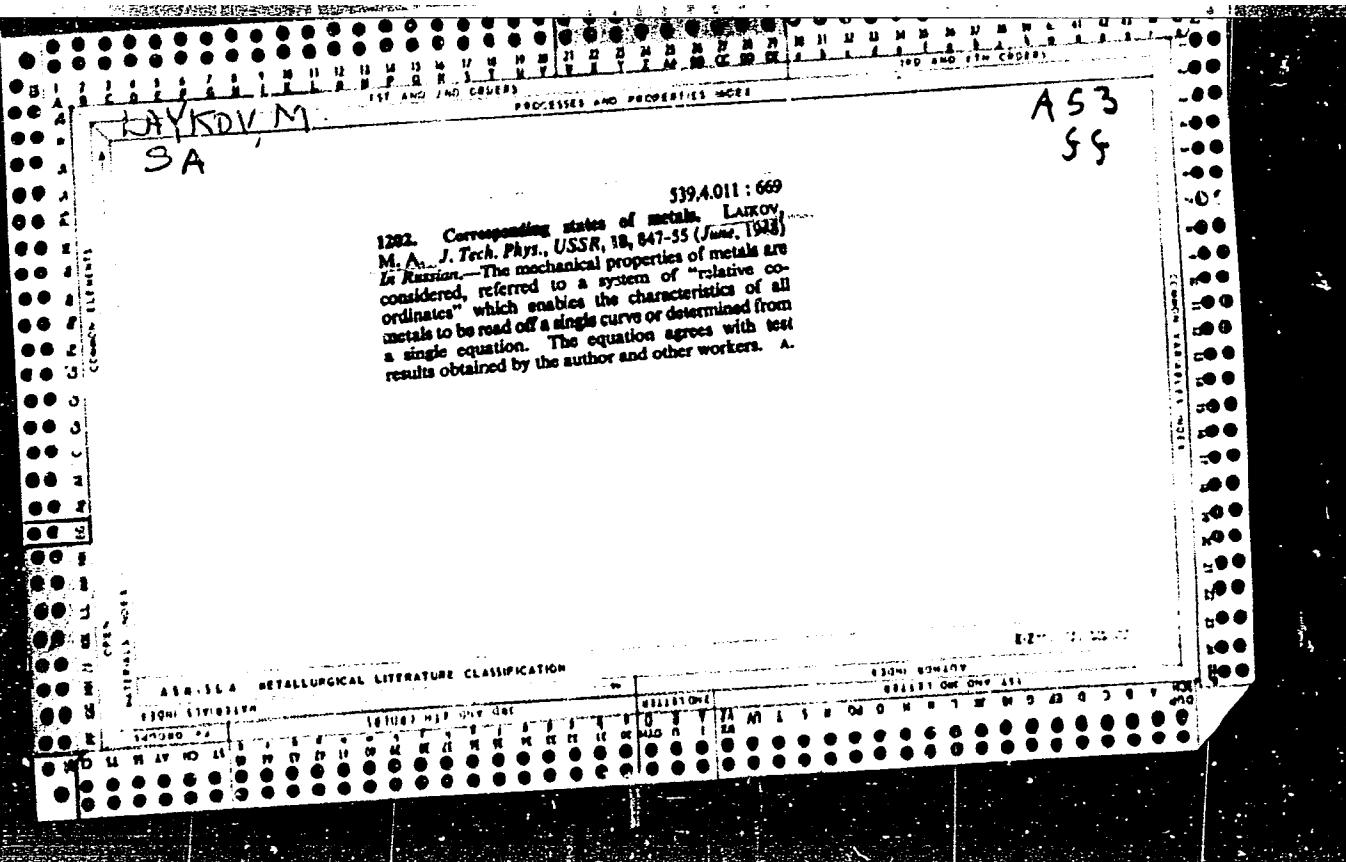
1. Kafedra finansov Leningradskogo finansovo-ekonomicheskogo  
instituta (for Zhevtyak, Larionova, Laykov, Yastrebov,  
Shashkovskiy).

BUROV, D.I., doktor sel'skokhoz. nauk, prof.; LAYKOV, I.A., kand. sel'sel'skokhoz. nauk; LUKANCHEV, D.N., nauchnyy sotrudnik; SAVENKO, A.V.

Fall plowing in the southeast. Zemledelie 26 no.7:25-28 J1 '64.

(MIRA 18:7)

1. Kuybyshevskiy sel'skokhozyaystvennyy institut (for Burov). 2. Pen-zenskaya oblastnaya gosudarstvennaya sel'skokhozyaystvennaya optytnaya stantsiya (for Laykov, Lukanchev, Savenko).



MATUKHINENKO, Ye.A., elektromekhanik; MOLOZHENKOV, B.M., elektromekhanik  
(Sofrino Moskovskoy dorogi); KHARLAMOV, G.F., elektromekhanik;  
LAIKOV, M.P., elektromekhanik (Verkhniy Baskunchak Privolzhskoy  
dorogi); DEGLIN, Ye.I., elektromekhanik; SUSHKO, P.L.  
elektromekhanik (Znamenka Odessko-Kishinevskoy dorogi)

Brief news. Avtom., telem. i svias' 9 no. 1140-41 N 165.  
(MIRA 18412)

LAYKOV, N. Z.

36319

LAYKOV, N. Z. I CHERNYSHeva, V. V.  
O Prichinakh nizkikh urozhayev krasnogo klevera. Seleksiya i semenovodstvo,  
1949, No. 11, s. 52-54

SO: Letopis' Zhurnal'nykh Statey, No. 49, 1949

CA

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Increasing the yield of grass in the rotation on sod-podzolic soils. N. Lalkov (Aleksandrov. Gosudarst. Selektions. Sta.). Sovet. Agron. 8, No. 5, 69-71 (1950). A report on lime and fertilizer expts. claiming positive effects when timothy was inoculated with azotogen.

J. S. Joffe

1. LAYKOV, N. Z.

2. USSR (600)

4. Soil inoculation

7. Use of bacterial fertilizers in the turf-podzol zone. Dost. sel'khoz. No. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

LAYKOV, N. Z.

Harvesting

Mechanization of the harvest on experimental plots. Dost. sel'khoz. no. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

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Experiments with the self-propelled combine. Sov agron 10 no. 3, 1952.

MONTHLY LIST OF RUSSIAN ACCESSIONS. Library of Congress, May 1952. UNCLASSIFIED.

0370

11242\* Conditions of Effective Use of Bacterial Fertilizers  
in Forest-Podzol Zones. (Russian.) N. Z. Laikov. *Selektsiya i*  
*Semenovodstvo*, v. 10, Jan. 1952, p. 61-64.

The use of bacterial fertilizers in acid soil with and without  
liming is discussed. Data from field tests are tabulated.

LAYKOV, N. Z.

LAYKOV, N. Z. - "The system of feeding plants in the grass-field crop-rotation heat-podzolic zone." Voronezh, 1955. Min Higher Education U.S.S.R. Voronezh Agricultural Inst. (Dissertations for degree of Candidate of Agricultural Sciences)

30: Knizhnaya letopis', No 46, 26 November 1955. Moscow.

USSR/Cultivated Plants - Grains.

M-4

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39245

Author : Laykov, N.

Inst :

Title : Corn as the Best Crop to Grow Prior to Winter Cereals.

Orig Pub : Kukuruza, 1957, No 8, 28-29.

Abstract : No abstract.

Card 1/1

- 50 -

LAIYKOV, N. Z.

USSR / Soil Science. Mineral Fertilizers.

J-4

Abs Jour: Ref Zhur-Biol., No 8, 1958, 34402.

Author : Butkevitch, V. V., Laiykov, N. Z., Beregolitsa,  
V. M.

Inst : Experimental Station of Shatilov.

Title : Effect of Phosphorite, Superphosphate and Manure  
on the Fertility of Lixiviated Black Earth.

Orig Pub: Vestn. s. kh. nauci, 1956, No 3, 34-43.

Abstract: In continuous experiments (from 1912 to the year 1946) on lixiviated black earth of the Experimental Station of Shatilov, the following fertilizer placements have been made: phosphorite, computed at the rate of 135 kg per hectare  $P_2O_5$  after every 3 years and superphosphate in the amount of 45 kg/ha  $P_2O_5$  every year, with manure foundation and without it. The latter was placed at

Card 1/2

30

USSR / Soil Science. Mineral Fertilizers.

J-4

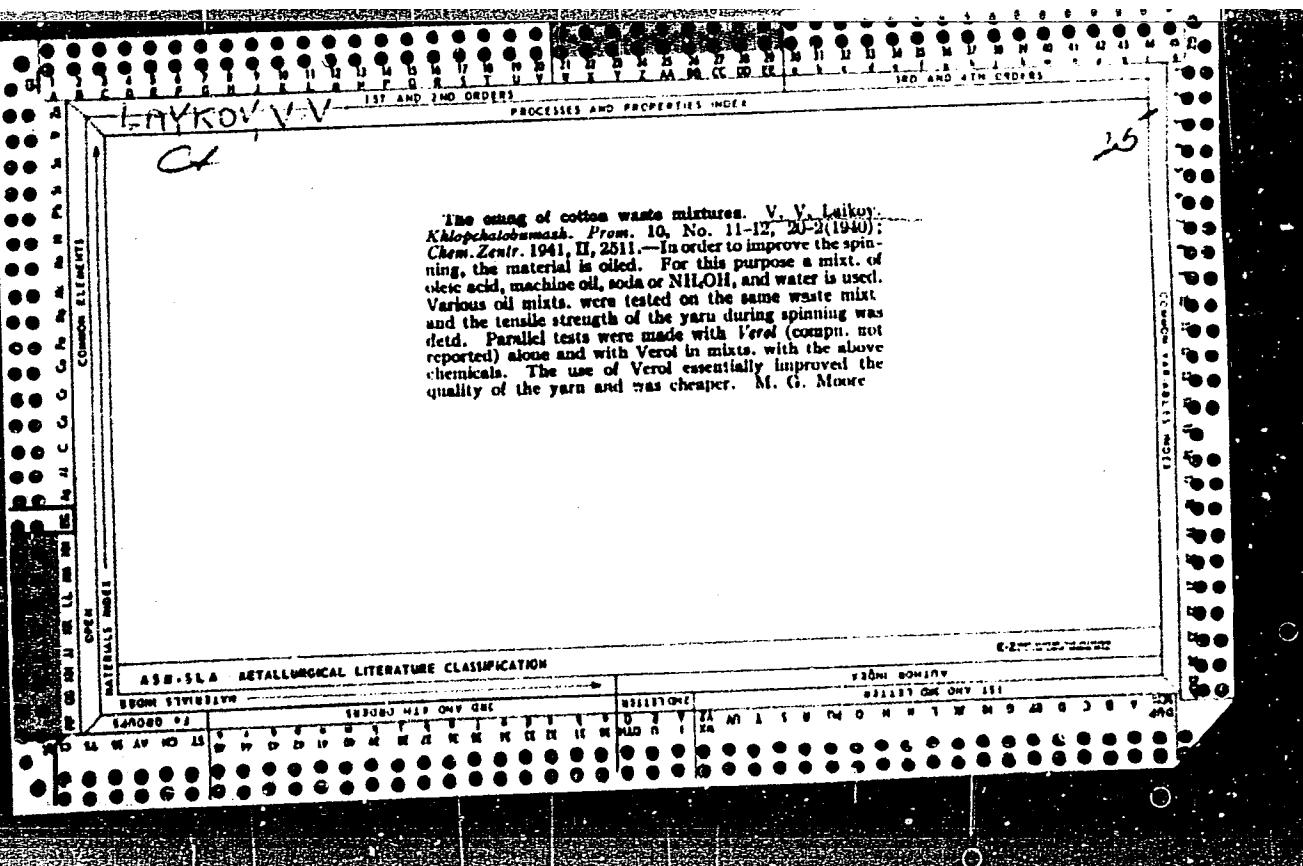
Abs Jour: Ref Zhur-Biol.. No 8, 1958, 34402.

Abstract: the rate of 18 t/ha after every 3 years. Over a 20 year period, the average increase of yield in grain of rye amounted to 4.9 in the case of phosphorite, 4.2 - superphosphate, and in case of manure, correspondingly to 6.6 and 6.2 c/ha. As a result of a continuous interaction with soil,  $P_f$  is subjected to decomposition and its assimilability is constantly increasing; on the other hand, the assimilability of  $P_s$  decreases without interruption. Pulverization and draining of soils leads to the increase of  $P_{2O_5}$ -soluble in water - in them. An important role played by manure and phosphatos, particularly combined, in the accumulation of N by clover on liziviated black earth, has been established. -- S. A. Nikitin.

Card 2/2

LAYKOV, N.Z., kand.sel'skokhozyaystvenrykh nauk

~~Effective utilization of newly plowed sod.~~ Zemledelie 6  
no.10:27-31 0 '58. (MIRA 11:11)  
(Grasses) (Cover crops)



LAYKOV, V.V.

42467. Novyye Seleksionnyye Sorta Khlopka V Poslevoennoy Stalinskoy Pyatiletke,  
Nauch.-Issled. Trudy (Tsentr. Nauch.-Issled. In-T Khlopchatobumazh. Prom.-Sti).  
Vyp. 1, 1948, S. 3-15.

LAYKOV, V. V. I BRAVYY, Z. A.

28431

Tipovyye sortirovki khlopiam. Tyekstil. Prom-stv. 1949 № 9, S. 9-10

SO: LETOPIS No. 34

LAYKOVA, I.I.

Autonomic development of endosperm in corn. Trudy TSSES no. 2:  
29-35 '64.  
(MIRA 17:9)

ANTONOV, A.S.; LAYKOVA, N.F.; IVANOVA, P.V.; GRIGOR'YEVA, S.P.;  
BELOZERSKIY, A.N., akademik

Changes in the amino acid composition of fibroin of the silkworm  
Bombyx mori L. induced by the analogs of the nitrogen bases of  
DNA and RNA. Dokl. AN SSSR 155 no. 5:1201-1204 Ap '64.  
(MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

KRAYZEL', S.Ye., inzh.; KIGEL', L.S., inzh.; LAYKOVSKIY, E.E.

Water heating PTM-20 boiler operating on gas and fuel oil.  
Prom.energ. 19 no. 2 28-30 F '64. (MIRA 17:5)

BURMISTROV, N.I.; CHUPAKHIN, V.A.; KIGEL', L.S.; LAYKOVSKIY, E.E.

Feedwater desorption and oxygen removal systems. Prom. energ.  
19 no.8:30-31 Ag '64. (MIRA 17:11)

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laborant. LALIYEV, D.S., red.; ANOKHINA, M.G., tekhn.red.

[Mechanization and electrification of collective farms in  
Kirghizistan] Mekhanizatsiia i elektrofikatsiia kolkhoznogo  
proizvodstva Kirgizii. Frunze, Akad.nauk Kirgizskoi SSR,  
Institut ekonomiki, 1959. 128 p. (MIRA 13:7)  
(Kirghizistan--Electrification)  
(Kirghizistan--Collective farms)

LOPATINSKIY, V.P.; SIROTKINA, Ye.Ye.; ZHEREBTSOV, I.P.; LAYMAN, M.A.

9-Vinylcarbazole. Metod. poluch. khim. reak. i prepar. no.11:  
37-39 '64. (MIRA 18:12)

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Immunological reactivity of the body of burn patients following  
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LAYNBURG, D.Ya.; RYABAYA, P.D.

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I. Kiyevskiy institut peredelivaniya krovi.

ROSHCHIN, V.A., inzh.; LAYNE, F.A., inzh.

Photoelectric relay for lighting control. Prom. energ. 17  
no.6:4-5 Je '62.  
(MIRA 17:6)

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000928910001-1

LAYNE,

V.

Distr: REL 1

*V. Silicon tetrachloride. J. P. Kostakowski, D. A. Kich-  
kin, and L. V. Lazarev. U.S.S.R. 109,316. Oct. 14, 1957.  
SiCl<sub>4</sub> decomposes in heating CCl<sub>4</sub> vapor over a Cr-Si alloy  
at 200-300°*

*M. Hosen*

*Jan*

APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000928910001-1"

Layne, L.V.

Preparation of silicon tetrachloride from carbon tetrachloride. N. F. Shorakowski, D. A. Kochkin, and L. V. Zhur. Priklad. Khim. 30, 1401-2 (1957). - CCl<sub>4</sub> (80 g.) was added dropwise to 150 g. of an alloy of Cu 20 + Si 80% at 200-300°. The condensate, after fractionation, gave 75.5 g. (88%) SiCl<sub>4</sub> b.p. 17.8°, contg. about 1% (CCl<sub>4</sub>). Some C deposited on the walls of the reaction tube. I. Ben-Gila

1-4E46  
1-4E32

KOCHKIN, D.A.; KOTRELEV, V.N.; KALIMINA, S.P.; KUZNETSOVA, G.I.; LAYNE,  
L.V.; CHERVOVA, L.V.; BORISOVA, A.I.; BORISENKO, V.V.

Organotin monomers and polymers. Vysokom.sosed. 1 no.10:  
1507-1513 O '59. (MIRA 13:3)

1. Nauchno-issledovatel'skiy institut plasticheskikh mass.  
(Tin organic compounds) (Polymers)

307/4582

**International symposium on macromolecular chemistry, Moscow, 1960.**

**Ljubljana 1960. 61. vols. 1-6. International Symposium on Macromolecular Chemistry Held in Moscow, June 1-6, 1960; Report and Summaries. Section I.) [Moscow, Izd-vo AS SSSR, 1960]. 160 p., 5,500 copies printed.**

**Sponsoring agency: The International Union of Pure and Applied Chemistry, Commission on Macromolecular Chemistry.**

**Techn. Ed.: T. V. Polyakova.**

**PURPOSE:** This collection of articles is intended for chemists and researchers interested in macromolecular chemistry.

**CONTENTS:** This is Section I of a multivolume work containing scientific papers on macromolecular chemistry in Moscow. The material includes data on the synthesis and properties of polymers, and on the processes of polymerization, copolymerization, polymerization, and polycondensation. Each article is presented in full or summarized in French, English, and Russian. There are 47 papers, 26 of which were presented by Soviet, Romanian, Hungarian, and Czechoslovakian scientists. No personalities are mentioned. References accompany individual articles.

Turkova, Ye. I.; B. A. Dolgovskij, T. G. Chumachenko, B. M. Kostylev, and I. N. Kurnikova (USSR). The Synthesis of Cis- and Trans-Cis-1,4-Polyisobutylene. On Cis-Isobutylene and a Study of Their Structure and Properties. 13
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Kolomety, N., and A. Sternschus (Czechoslovakia). Analysis of Cross-linked Polyesters. 27
Volkovitch, I. B., I. P. Vol'kovich, V. G. Tsvetkov, L. Z. Tsvetkova, and G. A. Glibenets (USSR). On the Synthesis and Properties of Cyclic and Linear Polymers of the Type of Poly-p,p'-Arylene and Polyphenylbenzene. 30
Makromol. Chem. (USSR). Cyclic Polymerization and Copolymerization of Diene Monomers. 33
Khushch, A. I., P. A. Tsvetkov, A. V. Tsvetkov, and B. A. Kostylev (USSR). Synthesis of Crystalline Polyisopropylene. 37
Afushtina, L. A., and Ye. N. Rostovtsev (USSR). Polymerization of Polyfunctional Compounds. 41
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Kolentsov, G. S., S. L. Durovova, and N. V. Klementeva (USSR). Germanium-containing Polymers. 56
Shostakovich, M. P., S. P. Kalitina, V. M. Kotovskij, D. A. Reznik, D. A. Reznik, D. A. Kurnikova, L. T. Leden, A. I. Borisenko, and V. V. Borisenko (USSR). 59
Orlova, N. V., I. M. Krasil'shchikova, and F. S. Florianty (USSR). The Effect of Chemical Structure on the Polymerization Activity of the Unsaturated Organosilicon Compounds. 63
Vol'kenshteyn, M. V. (USSR). Cooperative Processes in the Polymerization of Styrene. 67
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26290  
S/190/61/003/008/003/019  
B110/B220

15.8150

AUTHORS: Shostakovskiy, M. F., Kotrelev, V. N., Kalinina, S. P.,  
Kuznetsova, G. I., Layne, L. V., Borisova, A. I.

TITLE: Organotin monomers and polymers. IV. Synthesis and conversion  
of tin-containing esters of acrylic and cinnamic acids

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 8, 1961,  
1128-1130

TEXT: The present paper deals with the synthesis of organotin derivatives  
of cinnamic and acrylic acids. The synthesis was performed by a method  
developed by the authors. The vaporous alkyl halide was reacted in a tube  
furnace or autoclave with an Sn-Mg alloy in the presence of various solvents  
and catalysts. The alkyl-halide tin compounds formed were saponified with  
lye to the corresponding hydroxy derivatives, and then the esters were ob-  
tained by reaction with acrylic or cinnamic acid. 1) Triethyl-stannyl  
acrylate ( $C_2H_5)_3SnOCOCH=CH_2$ , was obtained from a 50% aqueous solution of  
acrylic acid at 5-10°C by adding triethyl stannol. The white crystalline

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Organotin monomers and polymers ...

26290  
S/190/61/003/008/003/019  
B110/B220

precipitate (melting point 102°C) could be dissolved in organic solvents. 2) In the same way, tributyl-stannyln acrylate was obtained from hexabutyl stannous oxide and acrylic acid. 3) The triethyl-stannyln ester of cinnamic acid was obtained from cinnamic acid and hexaethyl stannous oxide according to the equation  $(C_2H_5)_6Sn_2O + 2 C_6H_5-CHCOOH \rightarrow 2 (C_2H_5)_3SnOCOCH=CHC_6H_5 + H_2O$ . The organotin compounds obtained polymerize easily, and form transparent solid copolymers with styrene and methyl methacrylate. The thermo-mechanical properties of some polymers and copolymers are shown in Fig. 2. There are 2 figures and 3 Soviet references. X

ASSOCIATION: Nauchno-issledovatel'skiy institut plasticheskikh mass  
(Scientific Research Institute of Plastics)

SUBMITTED: September 1, 1960

Card 2/3

15.8150

26291  
S/190/61/003/008/004/019  
B110/B220

AUTHORS: Shostakovskiy, M. F., Kotrelev, V. N., Kuznetsova, G. I.,  
Kalinina, S. P., Layne, L. V., Borisova, A. I.

TITLE: Studies on the synthesis and conversions of organotin  
monomers and polymers. V. Study of the formation of  
organotin polymers as a function of the polymerization con-  
ditions, and some physicochemical properties of organotin  
polymers

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 8, 1961,  
1131-1134

TEXT: The present study deals with the yield in polymers of triethyl-  
stannyl methacrylate and acrylate as a function of polymerization time,  
temperature, initiation, and concentration. Benzoyl peroxide, azoisobutyric  
acid dinitrile, or triethyl-benzyl ammonium chloride served as initiators.  
The results are shown in Fig. 1. The composition of the copolymer from  
triethyl-stannyl methacrylate and methyl methacrylate was studied for  
initial molar ratios of the components of 1:1, 1:4, and 1:12. At an initial

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Studies on the synthesis and ...

26291  
S/190/61/003/008/004/019  
B110/B220

ratio of 1:1, the components of the copolymer were approximately equal. The composition was, however, 5:1 when the initial ratio had been 1:4. It is concluded that organotin compounds polymerize more slowly than methyl methacrylate. Experimental results: 1) The region of strong deformation of organotin methacrylates is found at higher temperatures than that of the corresponding acrylates. 2) The temperature of initial deformation decreases considerably with increasing size of the alkyl radicals. The dielectric properties of copolymers are listed in Table 1. The copolymer of triethylstannyl methacrylate with methyl methacrylate was easily hydrolyzed by alkalis. It is, however, stable in water, dilute HCl, and dilute  $H_2SO_4$ . Papers of M. M. Koton et al. (Ref. 4: Mezhdunarodnyy simpozium po makromolekulyarnoy khimii, Moskva, June, 1960, I sektsiya, p. 167. (International Symposium on High Molecular Chemistry, Moscow). are mentioned. There are 2 figures, 2 tables, and 4 Soviet references.

ASSOCIATION: Nauchno-issledovatel'skiy institut plasticheskikh mass  
(Scientific Research Institute of Plastics). Institut  
organicheskoy khimii AN SSSR (Institute of Organic Chemistry  
AS USSR)

Card 2/5

Layne, S.

Constructors of molecules. Znan.-sila 38 no.3:1-3 Mr '63.  
(MIRA 16:10)

LAYNE, V.F. (g. Sovetsk)

Use of Sala's hemoglobinometer as a simplified colorimeter for  
determining bilirubin, residual nitrogen, and cholesterol in  
blood. Lab.delo no.4:9-11 Jy-Ag '55. (MLRA 8:8)

(BLOOD,

bilirubin, cholesterol & nitrogen, deter., colorimetry  
with Sala's hemoglobinometer)

(BILIRUBIN, in blood,

determ. colorimetry with Sala's hemoglobinometer)

(CHOLESTEROL, in blood,

determ. colorimetry with Sala's hemoglobinometer)

(NITROGEN, in blood,

deter., colorimetry with Sala's hemoglobinometer)

(COLORIMETRY, apparatus and instruments,

Sala's hemoglobinometer, deter. of blood bilirubin,  
cholesterol & nitrogen)

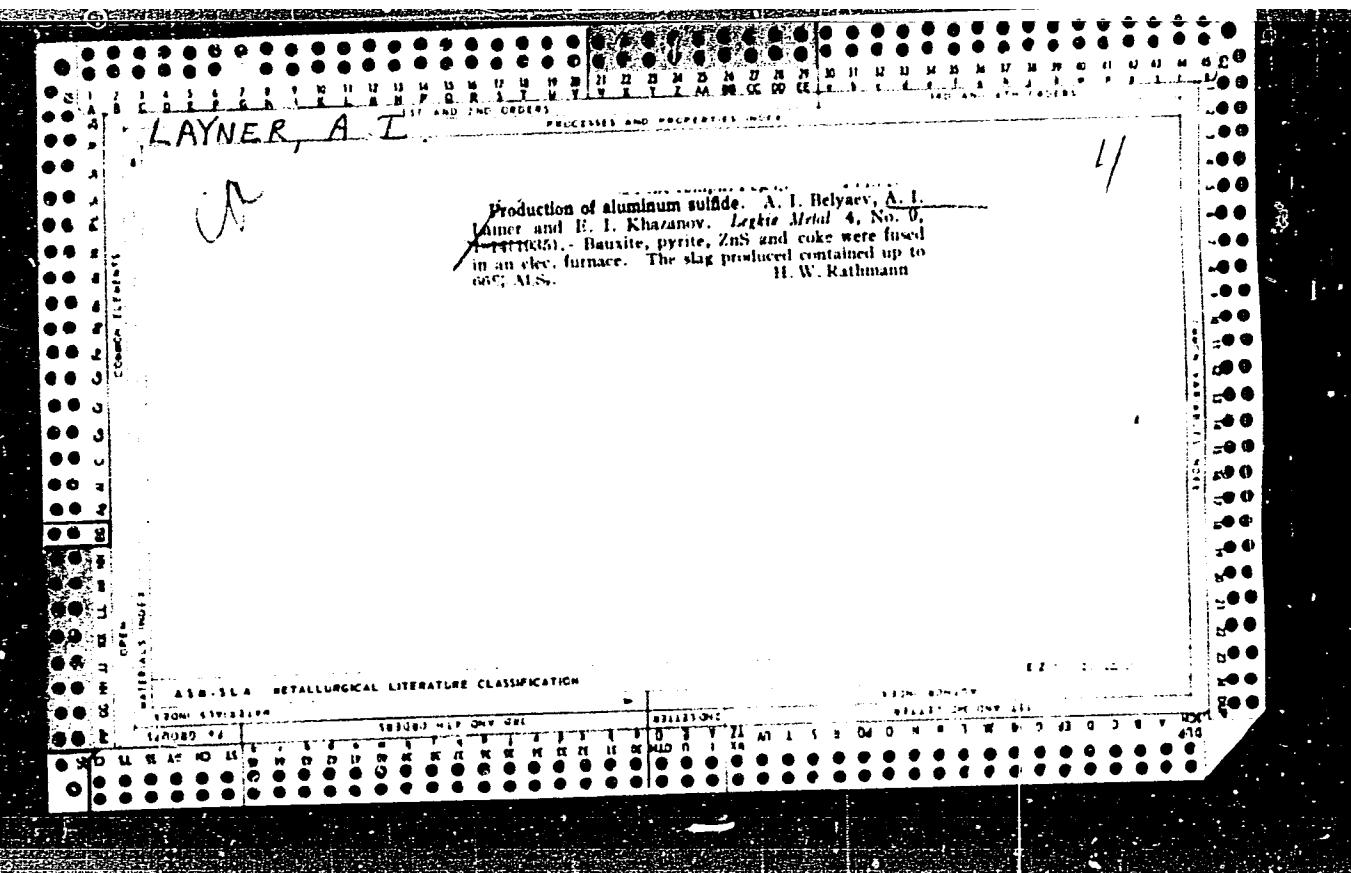
LAYNE, V.F., mayor meditsinskoy sluzhby

Easy method for a general hematological examination of persons affected  
by penetrating radiation. Voen.-med.zhur. no.7:33-34 J1 '56. (MIRA 9:11)  
(RADIATION SICKNESS) (BLOOD—EXAMINATION)

LAYNE, V.F.

Clinical significance of studies of bilirubin in the blood in Botkin's  
disease using D.I. Fin'ko's method. Lab.delo 5 no.6:29-33 N-D '59.  
(MIRA 13:3)

(BILIRUBIN) (HEPATITIS, INFECTIOUS)



LAYNER, A. I.  
A.C.S.

Piratines

Kyanite as a possible source for the production of alumina. A. I. LAYNER. Izobraniy Shershni Nauchnykh Trudov MOIKA 1937. Tsvetnykh Metalov & Zol. 1940, No. 9, pp. 431-48; Khim. Referat. Zhur., 4 [4] 90 (1941).—The extraction of  $\text{Al}_2\text{O}_3$  from the aluminum-silicate kyanite by direct leaching is practically impossible, even after previous calcination. L. conducted laboratory experiments on the decomposition of kyanite by incorporating it in the charge used for thermally driving off P from apatite. The replacement of  $\text{SiO}_4$  by kyanite, which contains  $\text{Al}_2\text{O}_5$  besides the  $\text{SiO}_4$ , increases the production of P from apatite. Simultaneously, the kyanite ( $\text{Al}_2\text{O}_5 \cdot \text{SiO}_4$ ) is converted into anorthite ( $\text{CaO} \cdot \text{Al}_2\text{O}_5 \cdot 2\text{SiO}_4$ ), which is readily soluble in acids. According to this method, a 50-mesh charge consisting of apatite, coal, and kyanite is melted in an electric furnace, the vapors of P are removed by condensation, and the slag is separated from the molten metals consisting of reduced Fe, etc. The slag is granulated, ground to 50-mesh, and subjected to magnetic separation, thus removing traces of Fe. The purified slag is treated with hot  $\text{H}_2\text{SO}_4$  (1.83  $\text{H}_2\text{SO}_4$ , diluted with an equal volume of  $\text{H}_2\text{O}$ ), the resulting pulp is centrifuged, and the filtrate is concentrated and crystallized. The crystals of  $\text{Al}_2(\text{SO}_4)_3 \cdot 18\text{H}_2\text{O}$  are washed with concentrated  $\text{H}_2\text{SO}_4$  to remove gypsum and calcined. The resulting  $\text{Al}_2\text{O}_3$  is washed with  $\text{HCl}$  and dried. For each ton of P, over 5 tons of  $\text{Al}_2\text{O}_3$  are produced. The process of the production of P proceeds normally without the use of additional energy. The possibility of the utilization of kyanite containing 63%  $\text{Al}_2\text{O}_3$  is of definite interest. The method suggested can be adopted for the utilization of clays, etc. A further, more thorough investigation is recommended. M.Ho.

LAYNER,  
CA

**Red sludge as an additional source of raw material for the alumina industry.** A. J. Lainer and I. N. Kitter, Tsvetnoy Metal., 19, No. 8, 54-8 (1947). Reusing the red sludge from the Bayer process for  $\text{Al}_2\text{O}_3$  extrn. is advocated. In compn., the red sludge resembles anorthosite, for the exploitation of which a plant is planned in Laramie, Wyo. The compn. of the red sludge is ordinarily  $\text{Al}_2\text{O}_3$ , 18-24,  $\text{Na}_2\text{O}$ , 4.0-8.0,  $\text{CaO}$  up to 8,  $\text{SiO}_2$ , 6.0-8.0,  $\text{TiO}_2$ , 4.0-5.0, and  $\text{Fe}_2\text{O}_3$  up to 50%. The scheme worked out for the utilization of red sludge comprises sintering the sludge with  $\text{CaO}$  and  $\text{Na}_2\text{CO}_3$  at around 1100°, grinding the sinter, and leaching it with wash water from the Bayer process. The filtered leach is combined with the aluminate soln. from the Bayer process for further treatment. The effect of  $\text{Fe}_2\text{O}_3$  content on the extrn. of  $\text{Al}_2\text{O}_3$  and  $\text{Na}_2\text{O}$  was studied on a series of mixes in which the mol. ratio of  $\text{Al}_2\text{O}_3:\text{SiO}_2:\text{CaO}$  was kept at 1:0.425:0.845, while the  $\text{Al}_2\text{O}_3:\text{Fe}_2\text{O}_3$  mol. ratio was varied from 1:0.0 to 1:1.25. As the  $\text{Fe}_2\text{O}_3$  content rose, the percentage of  $\text{Al}_2\text{O}_3$  leached out by  $\text{H}_2\text{O}$  from the ground sinter increased from 78.0 to 88.7%.

LAYNER, A.I.; KOLENKOVA, M.A.

Ways toward greater efficiency in the production of alumina. Izv.  
vys. ucheb. zav.; tavet. met. no.3:79-85 '58. (MIRA 11:11)

1. Moskovskiy institut tavetnykh metallov i zolota. Kafedra metallur-  
gii legkikh metallov.  
(Alumina)

LAYMER, A.I.; KOLENKOVA, M.A.; BERENT, Ya.K.

Preparing magnesium-base zirconium alloys. Izv.vys.ucheb.zav.;  
tsvet.met. 2 no.1:91-98 '59. (MIRA 12:5)

1. Moskovskiy institut tsvernykh metallov i zolota. Kafedra metallur-  
gii.leg'ich metallov.  
(Magnesium-zinc-zirconium alloys)

18(3)

SOV/128-59-5-17/35

AUTHOR: Layner, A.I., Doctor of Technical Sciences and  
Kolenkova, M.A. and Berent, Ya.K., Candidates of  
Technical Sciences

TITLE: Metallothermal Method of Producing a Circonium  
Master Alloy

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 5, pp 30-32 (USSR)

ABSTRACT: Small quantities of circonium affect the structure  
and the mechanical properties of magnesium castings.  
Fig. (1) shows a comparison between pure magnesium  
and magnesium alloyed with 0,71% circonium (see also  
Tab. 1). Circonium can be obtained according to for-  
mula 1. Formation of circonium takes place already at  
a temperature of 600°C. In order to keep the salts  
(KF.MgF<sub>2</sub>) obtained in the molten stage, a furnace tem-  
perature of 1100°C. is required. This temperature, how-  
ever, is rather unfavorable for magnesium. According to  
formula 2, zinc can be substituted for magnesium. The  
experiments show that only in presence of magnesium

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SOV/128-59-5-17/35

Metallothermal Method of Producing a Circonium Master Alloy

zinc is the formation of circonium allowed. In order to keep the obtained salts at the molten stage at lower temperatures, fluoride of kalium (KF) is added in order to receive the eutctoidal point of the alloy 2 KF.  $MgF_2$  (786°) equivalent to 17,5%  $MgF_2$ ). The maximum yield was obtained with 150 grams of anhydrous fluoride of kalium to 100 grams of fluoride of kalium circonium. Tab. (2) shows the temperature received for the melting of salts by adding various salts, values given in grams per 100 grams of  $K_2ZrF_6$ . It could be established that the best reaction temperature is about 850°C. adding fluoride of kalium (KF). A mixture of magnesium and 20% zinc for producing circonium has been used. Time of reaction 5-10 minutes. Besides zinc rare-earth elements can be added to the alloy if required. There are 1 photograph, 2 graphs and 3 tables. e.g. 70,6% magnesium, 9,5% zinc, 8,5% circonium, and 11,4% rare-earth elements. The used carnallite is

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SOV/128-59-17/35

Metallothermal Method of Producing a Circonium Master Alloy

originated in Solikam and of especially cheap and pure quality. Its chemical composition is shown in Tab. (3). The results in per cent of the obtained circonium for various mixtures of magnesium and zinc are listed in Tab.(4), rubric 1) showing the theoretically calculated values for 10% Zr, rubric 2) showing the yield obtained. It is established that by taking more zinc than magnesium the yield of circonium increases. There are 3 references ( 2 in English language, 1 in Russian language) 3 Figures and 4 Tables.

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S/081/62/000/010/055/065  
B168/B180

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TITLE: Separation of zirconium from sulfate solutions by the salting-out method

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TEXT: Various quantities of  $H_2SO_4$  are put into beakers each containing 50 ml zirconyl sulfate solution. Intense heating occurs while the solution is being mixed, and crystalline hydrate of zirconyl sulfate is precipitated as a white deposit during the subsequent cooling. Four hours after mixing the solutions, the deposits are filtered off in a vacuum. The extent to which the initial  $ZrO_2$  concentration of the sulfate solution effects the process was investigated. The degree of salting-out rises steeply with the concentration of  $ZrO_2$  in the initial

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